**Tool 2**(data).**7.** Additional Measures, with Examples (page 1 of 2)

## **Additional Measures**

Informed decisions require multiple sources of information. A district assessment plan must include assessments other than ITBS and ITED. The following text and chart discusses multiple measures used in the classroom to measure student achievement. All measures should have the highest degree of objectivity, technical adequacy, and alignment possible. The convergence of evidence becomes a powerful indicator for professional development goals.

To make informed decisions about goals for student learning and therefore, content for professional development, district and school personnel often need additional or more detailed information about what their students know and understand—information that may not be available from standardized tests such as ITBS/ITED.

In reading, for example, primary teachers frequently keep a profile of every student that includes each student's ability to recognize and name letters, associate sounds with letters and blends, and develop a sight vocabulary as well as a "running record" of a student's word attack skills and comprehension when reading from leveled materials. In other words, while the ITBS might indicate that a student has deficits in word attack skills, the teacher responsible for instructing that student will want to know exactly what skills a student has mastered and which require additional instruction.

Upper elementary and secondary teachers, when encountering students with poor reading skills, also will want to pinpoint the causes for a student's poor performance. Tests such as the *Names Test* enable a teacher to plot exactly what (if any) difficulties a student is experiencing with phonics. The *Basic Reading Inventory*, an individualized test for students up through grade nine, helps the teacher diagnose problems in fluency, sight vocabulary, word attack skills and comprehension.

Standardized tests of mathematical skills and understanding provide information on areas of difficulty for students that may again need elaboration with additional measures. For example, developers of the *Rational Numbers Project* curriculum have developed an interview protocol for probing student understanding of math concepts as well as their ability to apply math concepts in practical areas.

Teachers of science generally expect their students to master not only information in the various disciplines but processes for getting information. That is, the student is expected to know and use a systematic process for setting and testing hypotheses, precise laboratory techniques for measurement, and careful observation and recording of results. Science teachers may assess their students with teacher-made paper and pencil tests and observe them in performance tasks to made judgments about their knowledge and skill.

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## **Examples of Additional Measures**

The type of additional measure teachers might employ is determined by their questions about their students' knowledge, skill and understanding within any given discipline.

In addition to the standardized test used by a district or state, teachers may decide to administer a different standardized test. For example, a district that administers the *ITBS* once a year may decide to use the *Stanford Diagnostic Reading Test* (SDRT4) – a standardized test – to gain additional information about their students in a specific subject area. Or, they may decide to use a standardized test, which is individually administered, such as the *Gray Oral Reading Test* or the *Durrell Analysis of Reading Difficulty*, with a sample of students experiencing difficulty with reading.

Teachers seeking additional information about student knowledge and skills in specific areas have another valuable option in the less formal—yet widely published and distributed—measures such as *Fry's Sight Words Test* and the *Beginning Phonics Skill Test*. Some rubrics fit this category as well, although some are locally developed.

Teacher-made tests add another dimension of measurement to teacher options for assessment. The advantage of teacher-made tests, of course, is their alignment with what is taught. Whether multiple choice, short answer, matching, or essay items are employed, the teacher can determine if students can demonstrate mastery of the material covered in his/her course.

Informal or "authentic" assessments often add texture and context to our understanding of what students know and understand. Systematic observation and checklists provide invaluable insight into a student's mind. A checklist while conducting a book talk or an observation protocol as students demonstrate their knowledge in a science laboratory can provide diagnostic as well as summative or formative information.

Interviews with students also provide a window into the student's mind. Whether a teacher interviews an individual student (as in the Rational Numbers Project studies) or listens to students working in cooperative pairs working through a problem-solving flow chart (as described in David and Roger Johnson's *Meaningful and Manageable Assessment Through Cooperative Learning*), listening to students provides information about their understanding rarely available from other sources.

There are many sources of additional measures. We are not suggesting you embark on massive and time-consuming measurement projects but merely pointing out that one measure of a student's knowledge, skill and understanding in any discipline rarely provides all the information needed to guide instruction, and thus to guide decisions about professional development content.